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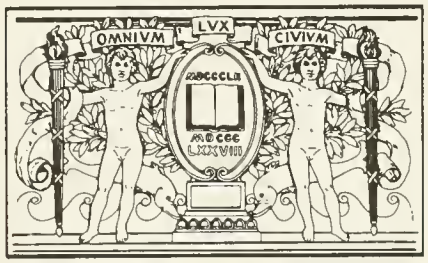


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# Transportation Access Plan

## ALLENDALE GLEN

Allandale Street
Boston, Massachusetts

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*Boston, Massachusetts 02210-1222*
*617 423-0186*

# Transportation Access Plan

## ALLENDALE GLEN

**Allandale Street**
**Boston, Massachusetts**

Another copy in BRA files

**October 5, 1988**

**by: Anthony J. DiSarcina, P.E.**

TRANSPORTATION ACCESS PLAN

for

ALLENDALE GLEN

PROJECT SUMMARY October 5, 1988

- Name: Allendale Glen, elderly residential development
  99 elderly dwelling units
  1 unit for resident site manager

- Address: 44 Allandale Street
  Boston, Mass.

- Location: Southerly side of Allandale Street
  the "Souther" property, just westerly of Centre Street

- Sponsor: McNeil & Associates, Inc.
  Address: 420 Providence Highway
  P.O. Box 407
  Westwood, Mass. 02090
  Contact person: Mr. William R. Roop, III
  Telephone number: (617) 326-5800

- Anticipated date of construction start: Fall 1988

- Anticipated date of construction completion: Spring 1990

- Current Zoning: S-3

- Parking requirements: 1 space per unit

- Loading Bay requirements: None

- Required permits, variances and licences:

  Order of Conditions, Boston Conservation Commission
  Building permits
  Curb cut permits
  Water and sewer connection permits
  Exceptions from Zoning Board of Appeals
  Any additional city/state permits as may be required

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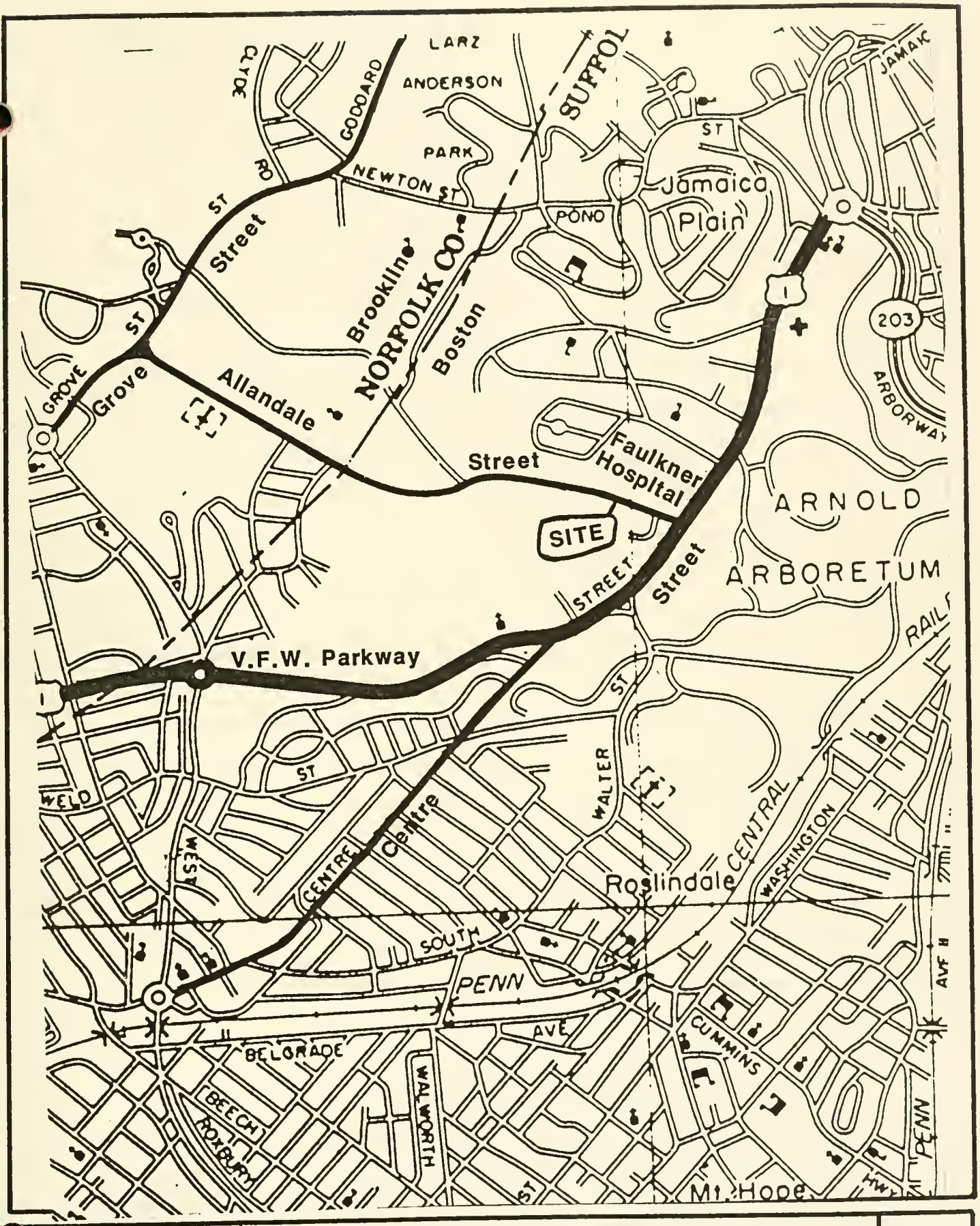
## 1.0 Introduction

This is the Transportation Access Plan (TAP) prepared for the proposed new construction of an elderly residential project (to be known as "Allendale Glen") at 44 Allandale Street in the Jamaica Plain neighborhood of the City of Boston, Massachusetts. The development is proposed by McNeil & Associates, Inc., with offices located at 420 Providence Highway in the Town of Westwood, Massachusetts 02090. The contact person is Mr. William R. Roop, III, Vice President, at telephone number (617) 326-5800.

The site is currently vacant (?) and the development proposes the new construction of 99 elderly residential dwelling units (and one resident manager unit) with 71 on-site parking spaces.

The proposed site is located on the southerly side of Allandale Street, just to the west of the intersection of Allandale Street with Centre Street (Route 1); see Figure 1, Location Map.

In accordance with the scope of work provided by the Boston Redevelopment Authority to McNeil & Associates, Inc., the items addressed in this Plan include trip generations, access and loading, pedestrian access, parking spaces, parking management and site circulation.




| Allendale Glen<br>Boston, Mass. | LOCATION MAP | Figure<br>1 |
|---|---|---|

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## 2.0 Existing Street Conditions

The site is located on Allandale Street, which is an east-west, collector-distributor street connecting Centre Street in the City of Boston to Grove Street in the Town of Brookline. Allandale Street has a variable width (between 24 and 30 feet) and is striped for one lane of traffic in each direction.

Centre Street is a major north - south arterial street leading to Downtown Boston. It is designated as US Route 1 in this area and is maintained by the Metropolitan District Commission (MDC). It is a divided roadway with two travel lanes in each direction.

Grove Street is a minor arterial street in the Town of Brookline. It also carries traffic in a north-south direction, but is not as significant as Centre Street. It generally has a travel lane in each direction.

The major intersection in the study area is that of Centre Street with Allandale Street. This is a three-way ("Tee"), signalized intersection with a separate left turn lane on Centre Street northbound, a separate right turn lane on Centre Street southbound and striped left and right turn lanes on the Allandale Street approach. Faulkner Hospital is located on the north side of Allandale Street just to the west of this intersection and the Hospital contributes significantly to the turning movements at this intersection.

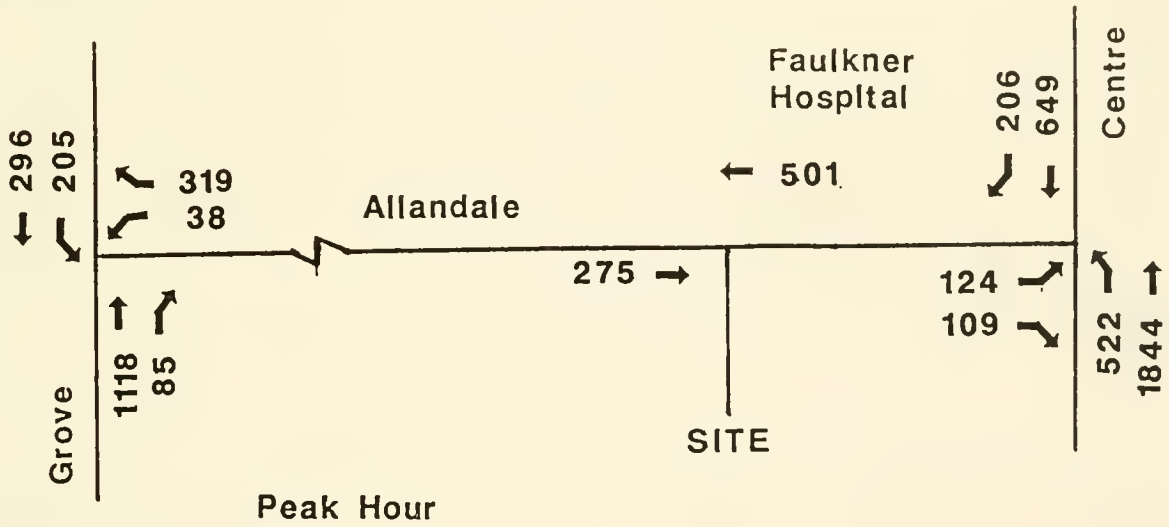
The intersection of Grove Street with Allandale Street is an unsignalized Tee intersection about a mile from the site. At this point, Grove Street has two travel lanes in each direction with a median divider. Allandale Street has separate left and right turning approach lanes.

## 3.0 Existing Traffic Conditions

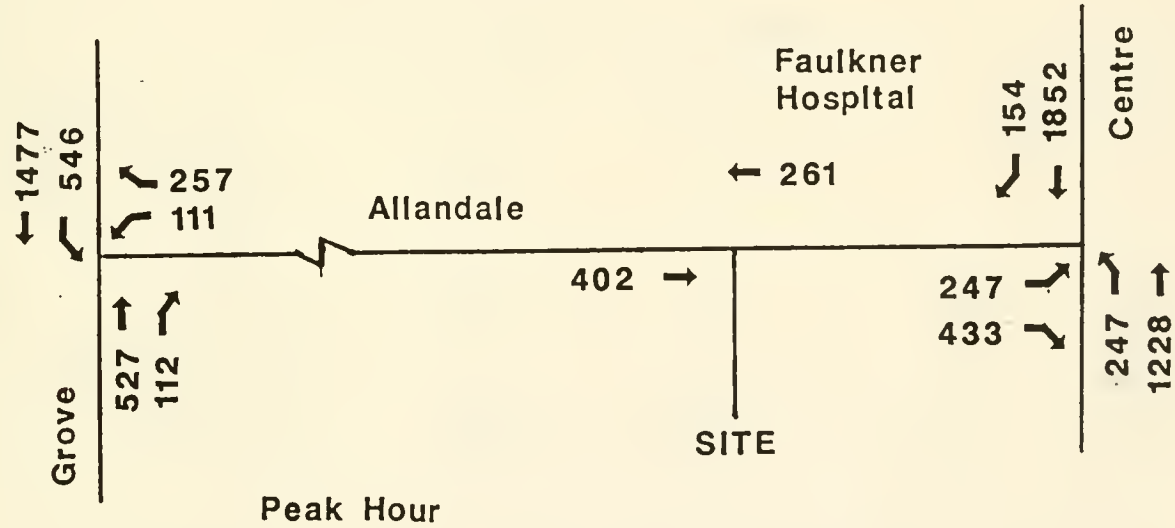
Independent traffic counts for this proposed development were not taken because the projected development traffic volumes (discussed in Section 4.0) are so relatively small and because existing traffic volumes were available from a prior Transportation Access Plan, dated July 1987, performed by H.W. Moore Associates, Inc., for the "Allandale Condominiums" located on a site just to the west of this proposed development.

The "Allandale Condominiums" Access Plan included traffic count data for the intersections of Allandale Street with Grove and with Centre Streets. The BRA scope letter for the "Allendale Glen" development indicated that two additional Centre Street intersections (with Walter Street and with Whitcomb Street) should also be considered in this Access Plan. In reviewing these additional two intersections, because the projected development volumes from this development are very small (with only some two to three vehicles expected on Centre Street in either direction during the peak hours), it is concluded that the additional two or three vehicles per hour will not adversely the operations of these intersections.

The recent traffic count data in the "Allandale Condominiums" Access Plan was used as the basis for existing traffic conditions for the "Allendale Glen" analysis. In addition, under the assumption that the "Allandale Condominiums" development will be implemented, the "Build" traffic volumes in that Access Plan are used as the existing traffic volume for this Access Plan. This type of assumption is conservative; i.e., it provides for an even higher volume of base case existing traffic volumes, which are are shown on Figure 2, Existing Traffic Volumes.




Peak Hour




Peak Hour

Note: Existing traffic volumes taken from Transportation Access Plan for "Allandale Condominiums", by H.W. Moore Associates, Inc., dated July 1987

| | | |
|---|---|---|
| Allandale Glen<br>Boston, Mass. | EXISTING<br>TRAFFIC VOLUMES | Figure<br>2 |

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## 4.0 Projected Development Traffic Volumes

Vehicle trip generation estimates are made by using trip generation factors compiled by professional transportation groups (such as the Institute of Transportation Engineers, ITE) or by other local or state public agencies. It is noted that the ITE trip generation data for this type of land use category is not extensive and that the City's Access Plan Guidelines do not include this type of information.

Therefore, in November of 1987, counts were made of actual traffic volumes at the "Webster Green" complex in Needham, Massachusetts. This is an existing development which is comparable to this proposed Allendale Glen development. Using these counts, the following Table "A" shows the estimate of vehicle trips expected for the 99 unit "Allendale Glen" development.

Table A

Vehicle Trip Generation Estimates

| | Trip Rate | # of Trips |
|---|---|---|
| AM PEAK HOUR | | |
| Into Site | 0.07 | 7 |
| Out of Site | 0.09 | 9 |
| Total | 0.16 | 16 |
| PM PEAK HOUR | | |
| Into Site | 0.13 | 13 |
| Out of Site | 0.08 | 8 |
| Total | 0.21 | 21 |
| DAILY, 24-Hr. ADT | | |
| Into Site | 1.65 | 164 |
| Out of Site | 1.65 | 164 |
| Total | 3.30 | 328 |

It is important to note that these projected development traffic volumes are some 50% less than those that would be generated by the implementation of an "as-right" development of some 46 single-family, detached housing units.

Table "A" above indicates that the site would generate a total of about 16 vehicle trips during the AM peak hour; about 7 trips entering the site and about 9 trips exiting the site. This is the equivalent of approximately 1 additional vehicle trip each 4 minutes on average.

During the evening peak hour, there would be about 21 vehicle trips; about 13 entering the site and about 8 exiting the site. This is the equivalent of about 1 additional vehicle each 3 minutes on average.

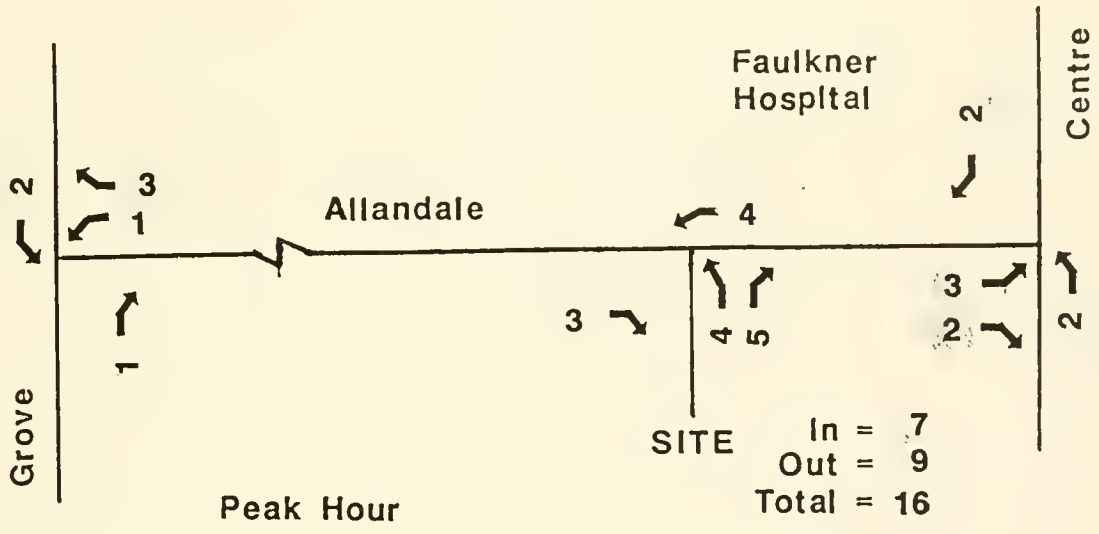
These peak hour site traffic volumes are relatively low and can be absorbed into existing street volumes without difficulty.

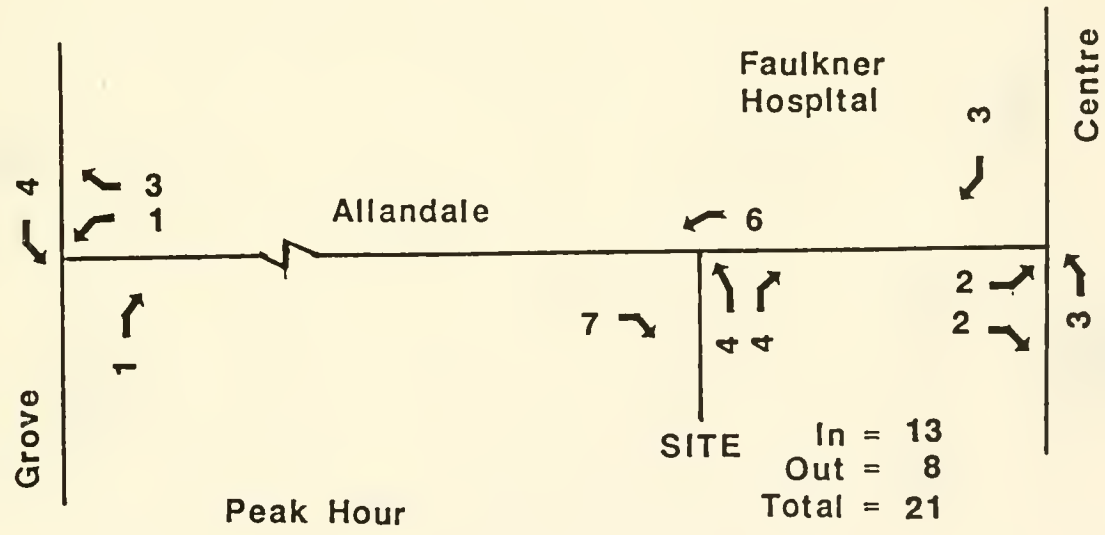
These projected development traffic volumes are shown on Figure 3, Development Traffic Volumes.

On an all-day, 24-hour basis, the proposed site would generate about 328 vehicle trips per day with about 164 entering the site and about 164 exiting the site.

## 5.0 Future Traffic Volumes

The future traffic volumes are derived by adding the existing traffic volumes from Figure 2 (which are existing street traffic volumes plus the increment from the "Allandale Condominiums") to development traffic volumes from Figure 3 to obtain the future traffic volumes as shown in Figure 4, Future Traffic Volumes.




Note: Existing traffic volumes taken from Transportation Access Plan for "Allandale Condominiums", by H.W. Moore Associates, Inc., dated July 1987

| Allandale Glen<br>Boston, Mass. | DEVELOPMENT<br>TRAFFIC VOLUMES | Figure<br>3 |
|---|---|---|

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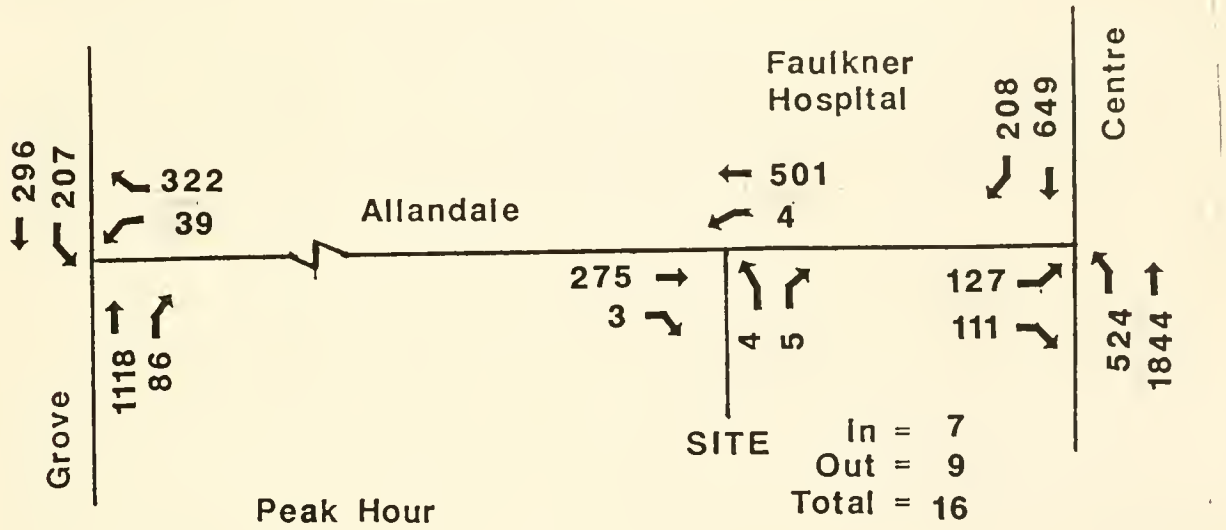
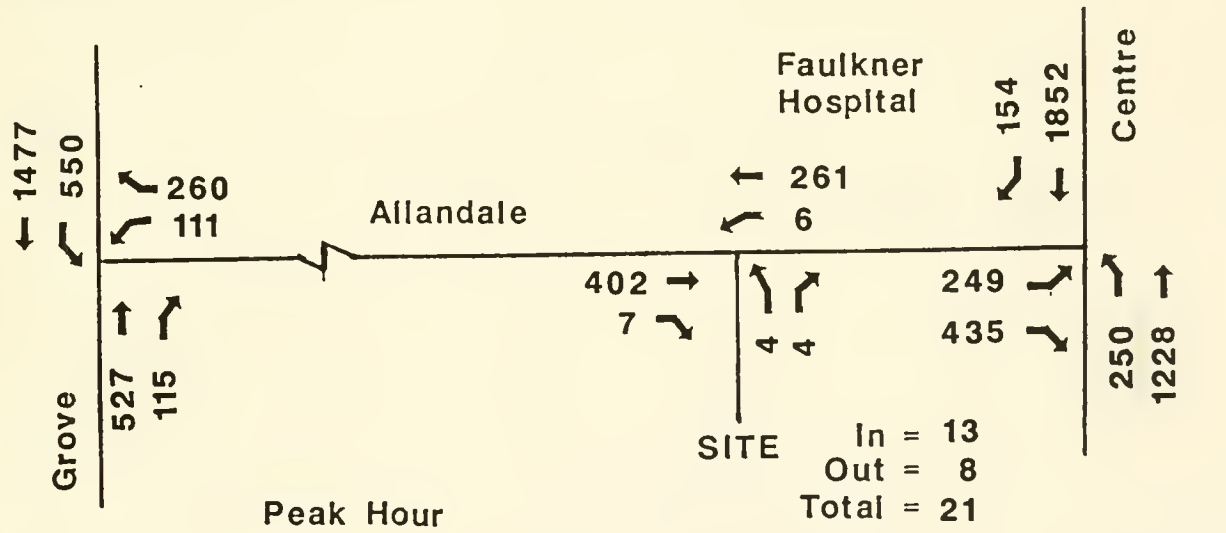



Note: Existing traffic volumes taken from Transportation Access Plan for "Allandale Condominiums", by H.W. Moore Associates, Inc., dated July 1987

| Allandale Glen<br>Boston, Mass. | FUTURE<br>TRAFFIC VOLUMES | Figure<br>4 |
|---|---|---|

## 6.0 Analysis of Traffic Operations

Detailed traffic capacity analyses were not performed because of the essentially negligible effect of the additional "Allendale Glen" traffic volumes on Allandale Street, particularly at the Centre Street or Grove Street intersections.

If the traffic volumes on each approach leg of an intersection are summed, then the total traffic volume entering the intersection is obtained. If this calculation is performed for both the existing and future conditions, the net effect (in volume and percentage) of the development is obtained.

The following Table "B", Intersection Traffic Volume Changes, demonstrates the very small amounts of additional traffic contributed to the Allandale Street intersections by the "Allendale Glen" development.

Table B

Intersection Traffic Volume Changes

| | Existing | Future | Net Increments Number | Net Increments Percent |
|---|---|---|---|---|
| AM Peak Hour | | | | |
| Allandale at Centre | 3,454 | 3,463 | 9 | + 0.26 % |
| Allandale at Grove | 2,061 | 2,068 | 7 | + 0.34 % |
| Allandale at Site | 776 | 792 | 16 | + 2.1 % |
| PM Peak Hour | | | | |
| Allandale at Centre | 4,161 | 4,171 | 10 | + 0.24 % |
| Allandale at Grove | 3,030 | 3,041 | 11 | + 0.36 % |
| Allandale at Site | 663 | 684 | 21 | + 3.2 % |

It is noted that the "existing" traffic volumes are the 1995 "Build" traffic volumes from the "Allandale Condominiums" Access Plan and, therefore, included that development and other growth levels from that Access Plan. The "future" traffic volumes include the development traffic volumes from this "Allendale Glen" project added to the "existing" (i.e., 1995 "Build" traffic volumes).

Table "B" indicates that the net increment in additional traffic volumes at the Allandale Street intersections with Centre or Grove Streets vary from 7 to 11 additional vehicles per peak hour, with a percentage increase varying from +0.24% to 0.34%. This is an average increase of approximately one additional vehicle each 5 to 6 minutes. This net change is statistically insignificant if the daily and monthly variations at these intersections are considered.

At the site access on Allandale Street, the net increases are somewhat larger (16 additional vehicles in the morning and 21 additional vehicles in the evening), but these net increments are still in the order of only one additional vehicle each 3 to 4 minutes and, are likely within the normal variation of traffic volumes on Allandale Street itself near the site access.

Thus, it appears reasonable to conclude that the traffic volume increases attributable to the "Allendale Glen" development are very small and will be essentially negligible with respect to traffic operations on Allandale Street and in the general neighborhood area.

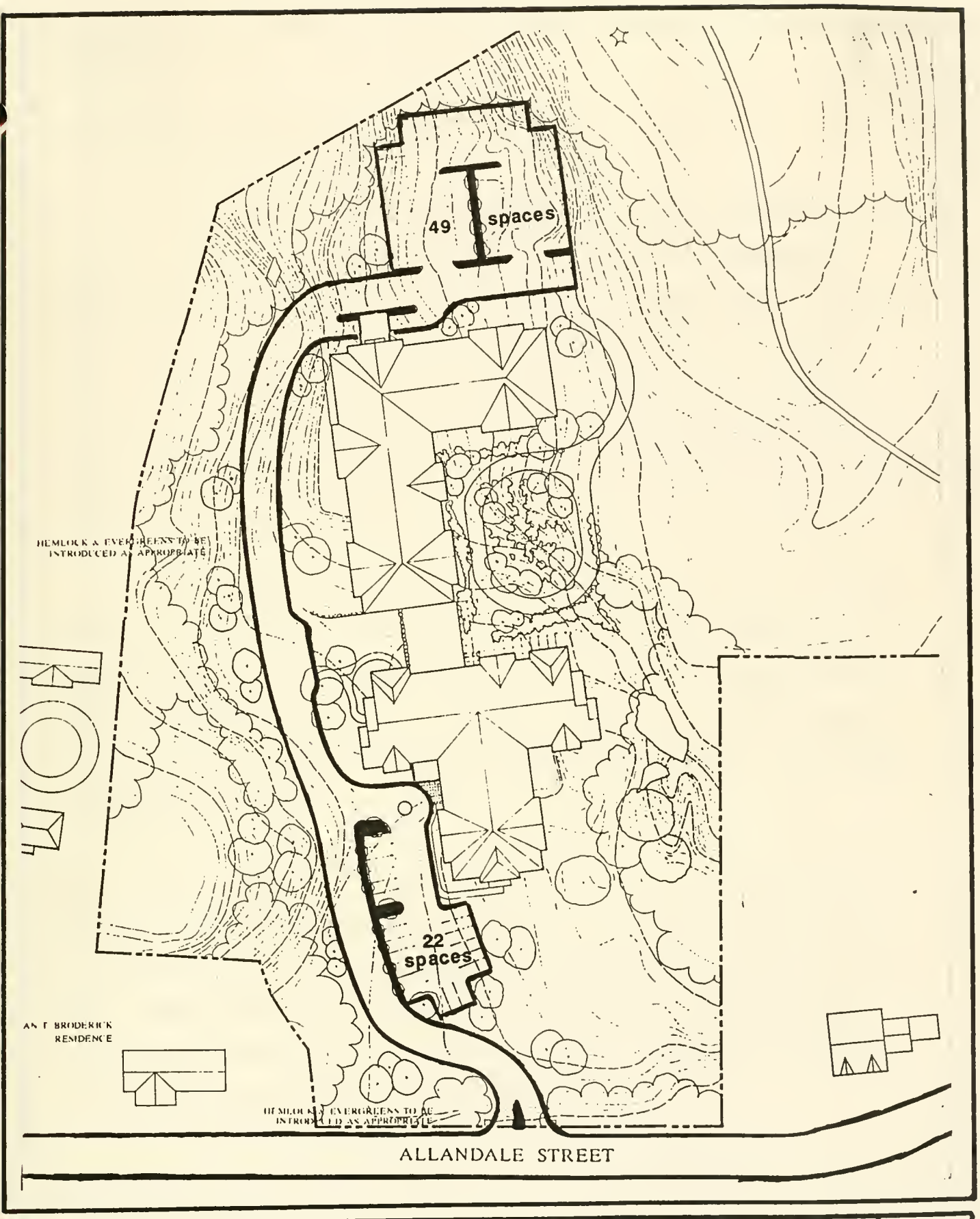
## 7.0 Parking Issues

The "Allendale Glen" development program would construct 99 elderly residential units with 71 on-site, at-grade parking spaces. The parking layout is shown on Figure 5, Site Plan.

The zoning ordinance requires a provision of 1 space per dwelling unit for a total of 100 parking spaces. The "Allendale Glen" development will provide a total of 71 parking spaces which is less than the zoning requirement. McNeil's experience on other existing identical developments has been that 1 space per unit provides too many spaces. However, the site plan will be drawn to indicate where the additional 29 spaces would be located if they are found necessary when the development is occupied.

The long term experience of McNeil & Associates, Inc. in operating such elderly complexes indicates that many of the elderly residents of the site will not normally own vehicles and that assigning specific spaces to individual tenants or dwelling units is not effective. Rather, tenants will be assigned general areas where they may park vehicles, if in fact, they do so own them. Residents who own vehicles will be assigned parking stickers and parking of non-resident vehicles will be controlled by towing or other appropriate legal measures. The remainder of the parking spaces will be designated for handicap, staff and visitor parking.

The developer's experience in operating this type of housing has shown that the provision of "handicap" spaces is of significance in such a development and, therefore, will designate 5 spaces as "handicap".




| Allandale Glen<br>Boston, Mass. | SITE PLAN | Figure<br>5 |
|---|---|---|

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## 8.0 Public Transportation

Public transportation services (such as rapid transit and buses) are a relevant mode of transportation for elderly residential developments because the elderly tend to have lower automobile ownership rates. Because the elderly do not work, they do not make peak hour trips and do schedule their other trips (such as shopping or medical) during off-peak periods. In addition, the developer does not encourage vehicle ownership and encourages those residents with vehicles to share vehicle trips with other site residents. This policy further reduces the number of vehicle trips.

It is noted that the MBTA operates Bus Route # 38 which runs from Wren Street in West Roxbury to the Forest Hill Station of the Orange Line which then connects into the region's rapid transit system. This system could be used either by site residents or visitors. A bus stop is located conveniently on Centre Street near the Allandale Street intersection, a very short distance from the site.

While not an absolutely guaranteed site amenity, the developer will assist in arranging for scheduled bus and/or van transportation for site residents for trips to local shopping malls, restaurants, cultural events, etc. These trips will also be arranged in conjunction with appropriate retailers or other providers of resident services and would utilize contract services with local bus, van or taxi companies.

## 9.0 Access, Loading and Pedestrian Issues

As can be seen on Figure 5, Site Plan, all vehicles will enter and exit the site from a single driveway to Allandale Street. This driveway is designed to allow a lane of travel in each direction and will include a small median island at Allandale Street to provide additional safety in making traffic turning movements. The site driveway is located such to provide the maximum possible visibility along Allandale Street. Other than the connection of the driveway into Allandale Street, no other changes in Allandale Street are proposed.

All loading and unloading of delivery vehicles will occur on the site and there is no need to use public streets to maneuver vehicles for these purposes. The site will not include formal loading bays (in the buildings), but areas have been set aside for the delivery of goods to and from the site.

A sidewalk will be provided along the access driveway to provide for safe pedestrian access from Allandale Street to the site and to connect the site access sidewalk with the City's existing sidewalk located some 200 feet from the site access point. The larger scale site plan shows the relationship of pedestrian paths between parking areas and the residences. Due regard to the needs of the elderly has been taken into account.

## 10.0 Impact Mitigation

### 10.1 Construction

The construction program will include necessary site regrading and the construction of the proposed development. Major trucking movements are anticipated to occur from Centre Street which connects into the city's arterial street system.

The developer will submit a specific plan for management of construction vehicles and require the contractor to make time of day delivery of materials during the normal construction time periods. The construction program is anticipated to occur normally during weekdays and no major activities are anticipated to occur on weekend days or during the evening. Construction worker parking will be provided on-site.

In accordance with City direction, the developer will post appropriate construction signing for the protection of area residents and pedestrians. The developer is very sensitive to the nature of construction activities as demonstrated by the recent construction without any safety incidents of the "Glen Grove" facility which was located next to an elementary school in the Town of Wellesley.

The construction program will comply with applicable City requirements and will not require excessive street occupancies except for the purpose of utility connections and street and sidewalk reconstructions. All construction materials will be stored on-site or at contractor locations until required for usage.

## 10.2 Transit Usage

The management program of the building will include provisions for the posting of MBTA transit information such as schedules, maps, etc. to provide residents with easily available information. The developer will initiate a program for residents to avail themselves of an MBTA pass with appropriate elderly discounts.

The nearby accessibility of the MBTA's Bus Route # 38 will allow for some transit usage. However, the developer recognizes that elderly residents need a more customized service and will develop thoses services previously described. The developer will coordinate such transit activities with those provided by the City's elderly service agencies.

## 10.3 Parking Management

As discussed previously, residents will be provided with on-site parking spaces generally located to minimize walking. The parking areas will be periodically patrolled by on-site management employees to enforce on-site regulations.

## 10.4 Costs

The developer will incur the costs for repairs necessary to connect the access driveway into Allandale Street as a part of the general development costs.

## 11.0 Monitoring Mechanism

Since this is an elderly residential development with very low traffic generating characteristics, it is recommended that the access plan goal be the utilization of buses and vans to provide transportation services for site residents.

The developer will comply with City requirements for monitoring the progress of achieving the goal of this Access Plan and will prepare a monitoring report for the City one year after the development has been occupied and whenever after so required by the City.

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